

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,204,804 B2
APPLICATION NO. : 10/656557
DATED : April 17, 2007
INVENTOR(S) : Zirps et al.

Page 1 of 9

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Sheets 1-7 and Title Page: replace with sheets 1-8 in formal form as shown in attached sheets.

Claim 2, column 7, line 30: replace "an accessory" with --the second component--.

Signed and Sealed this

Seventh Day of August, 2007



JON W. DUDAS
Director of the United States Patent and Trademark Office

(12) United States Patent
Zirps et al.(10) Patent No.: US 7,204,804 B2
(45) Date of Patent: Apr. 17, 2007

(54) ENDOSCOPIC ACCESSORY MOUNTING ADAPTOR

(75) Inventors: Christopher T. Zirps, Sharron, MA (US); Timothy R. Membrino, Acton, MA (US); Scott Reed, Monroe, CT (US); Eric Mears, South Bristol, ME (US)

(73) Assignee: C.R. Bard, Inc., Murray Hill, NJ (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 10/656,557

(22) Filed: Sep. 5, 2003

(65) Prior Publication Data

US 2004/0215058 A1 Oct. 28, 2004

Related U.S. Application Data

(60) Provisional application No. 60/408,750, filed on Sep. 6, 2002.

(51) Int. Cl.

A61B 1/00 (2006.01)

(52) U.S. Cl. 600/127; 600/129; 600/104

(58) Field of Classification Search 600/127, 600/104, 129, 121, 123

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

4,226,239 A	10/1980	Polk et al.
4,230,116 A	10/1980	Watson
4,735,194 A	4/1988	Stiegmann
4,788,966 A	12/1988	Yoon
5,201,908 A	4/1993	Jones
5,259,366 A	11/1993	Reydel et al.
5,275,151 A	1/1994	Shockley et al.
D344,334 S	2/1994	Dulebohn et al.

5,325,746 A	7/1994	Anderson
5,356,416 A	10/1994	Chu et al.
5,382,254 A	1/1995	McGarry et al.
5,383,875 A	1/1995	Bays et al.
5,409,478 A	4/1995	Gerry et al.
5,447,148 A	9/1995	Oaoda
5,470,328 A	11/1995	Furnish et al.
5,498,256 A	3/1996	Furnish
5,503,616 A	4/1996	Jones
5,507,797 A	4/1996	Suzuki et al.
5,569,268 A	10/1996	Hosoda
5,601,568 A	2/1997	Chovillon et al.

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 10/656,083, filed Sep. 5, 2003, Zirps et al.

(Continued)

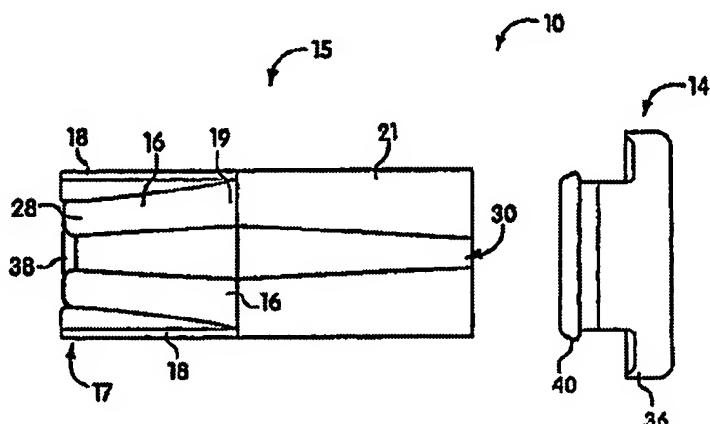
Primary Examiner—Beverly M. Flanagan

(74) Attorney, Agent, or Firm—Kirkpatrick & Lockhart Nicholson Graham LLP

(57) ABSTRACT

The present invention relates to a mounting adapter for releasably securing accessories, tools, or their medical instruments to the distal end of an endoscope. The adapter is compatible with endoscopic accessories that have a cylindrical mounting surface, which becomes positioned over a length of the distal end of an endoscope. The adaptor is preferably provided in two components to support both ends of a cylindrical accessory on the endoscope surface. The adapter is configured to hold the accessory on the endoscope shaft by frictional engagement and is configured to maintain the accessory concentric with the shaft along its length. The adapter also is configured to mount an accessory to a wide range of commercially available endoscope diameters.

14 Claims, 7 Drawing Sheets



U.S. Patent

Apr. 17, 2007

Sheet 1 of 7

7,204,804 B2

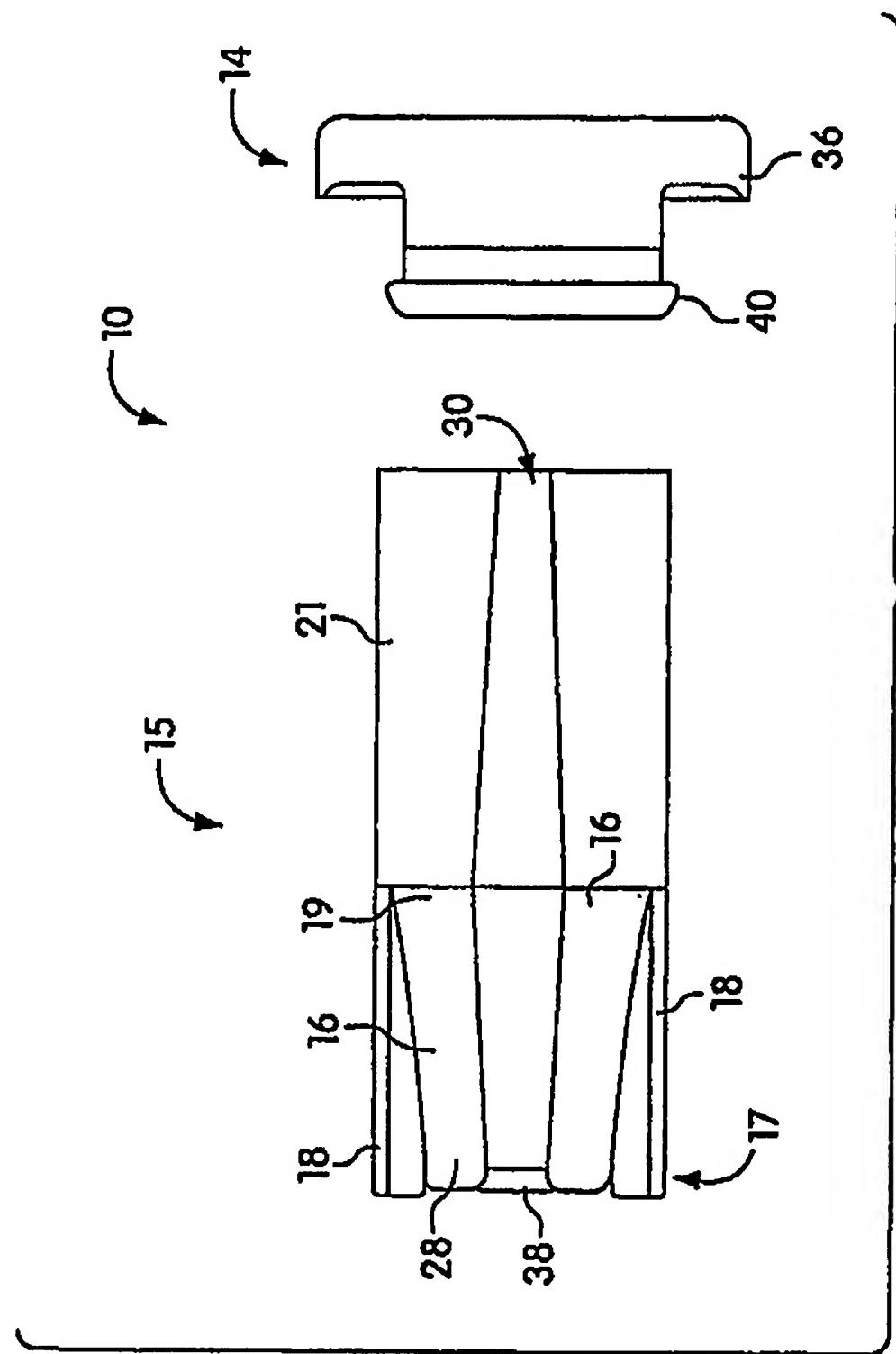


Fig. 1

U.S. Patent

Apr. 17, 2007

Sheet 2 of 7

7,204,804 B2

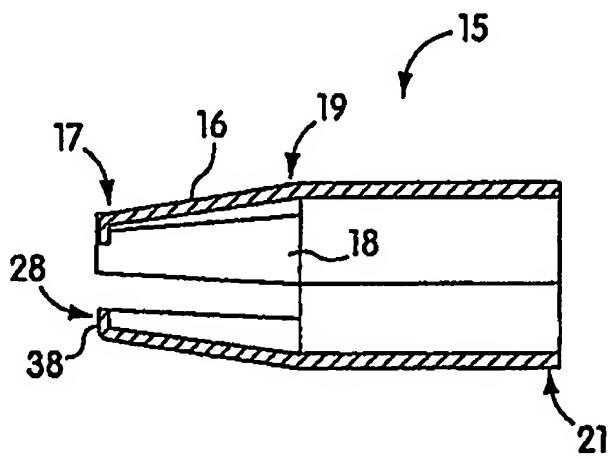
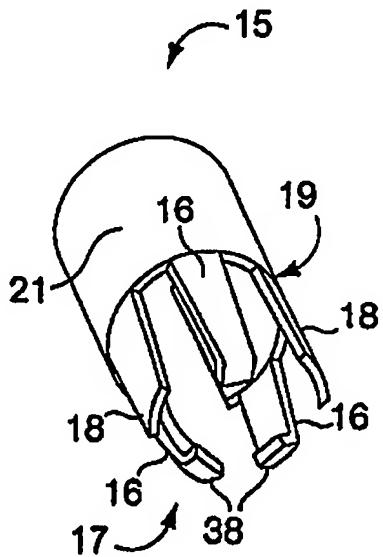


Fig. 2C

Fig. 2A

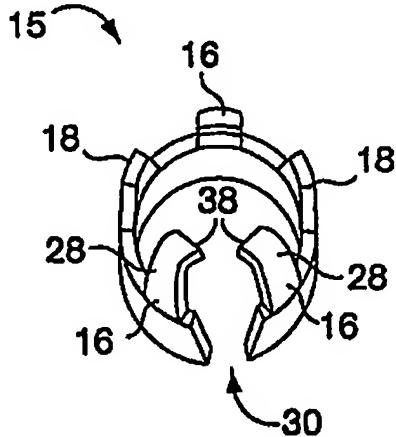


Fig. 2B

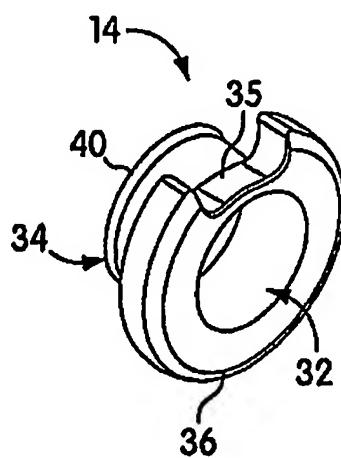


Fig. 2D

U.S. Patent

Apr. 17, 2007

Sheet 3 of 7

7,204,804 B2

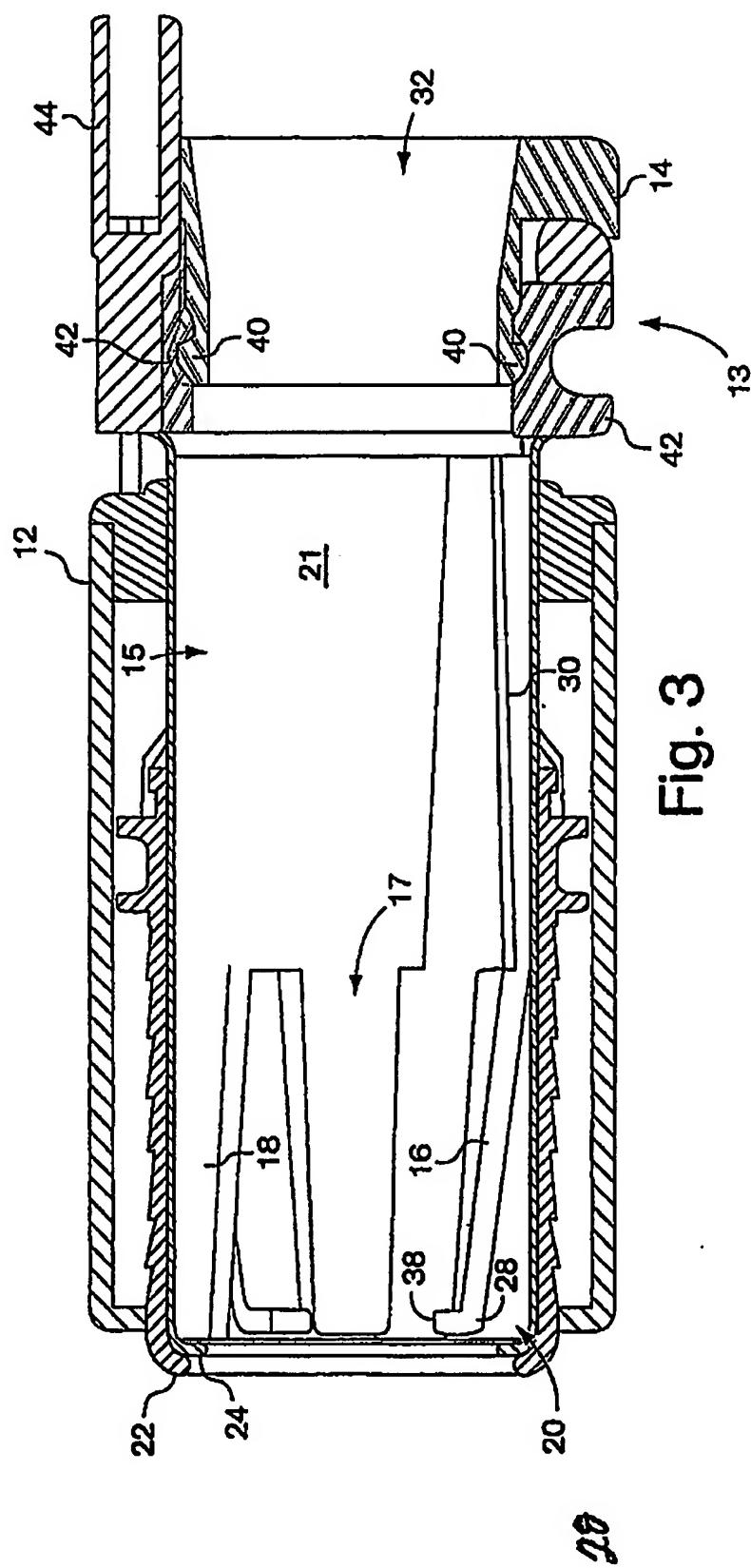


Fig. 3

U.S. Patent

Apr. 17, 2007

Sheet 4 of 7

7,204,804 B2

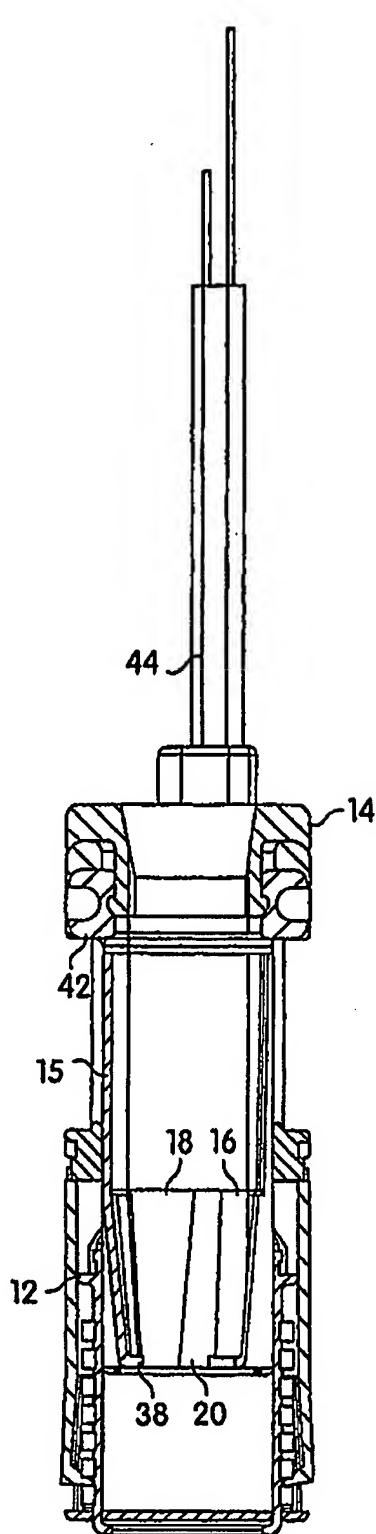


Fig. 4A

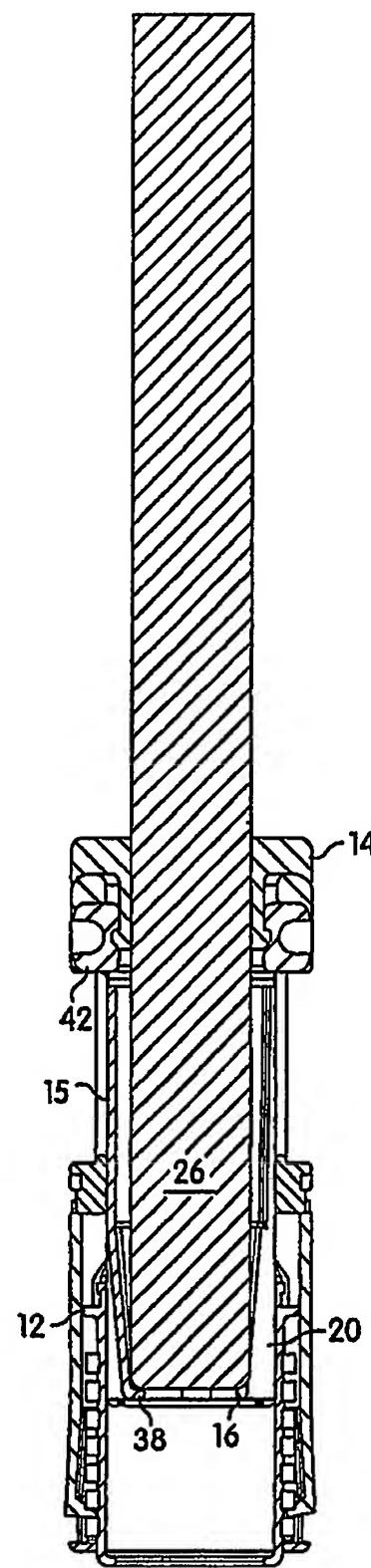


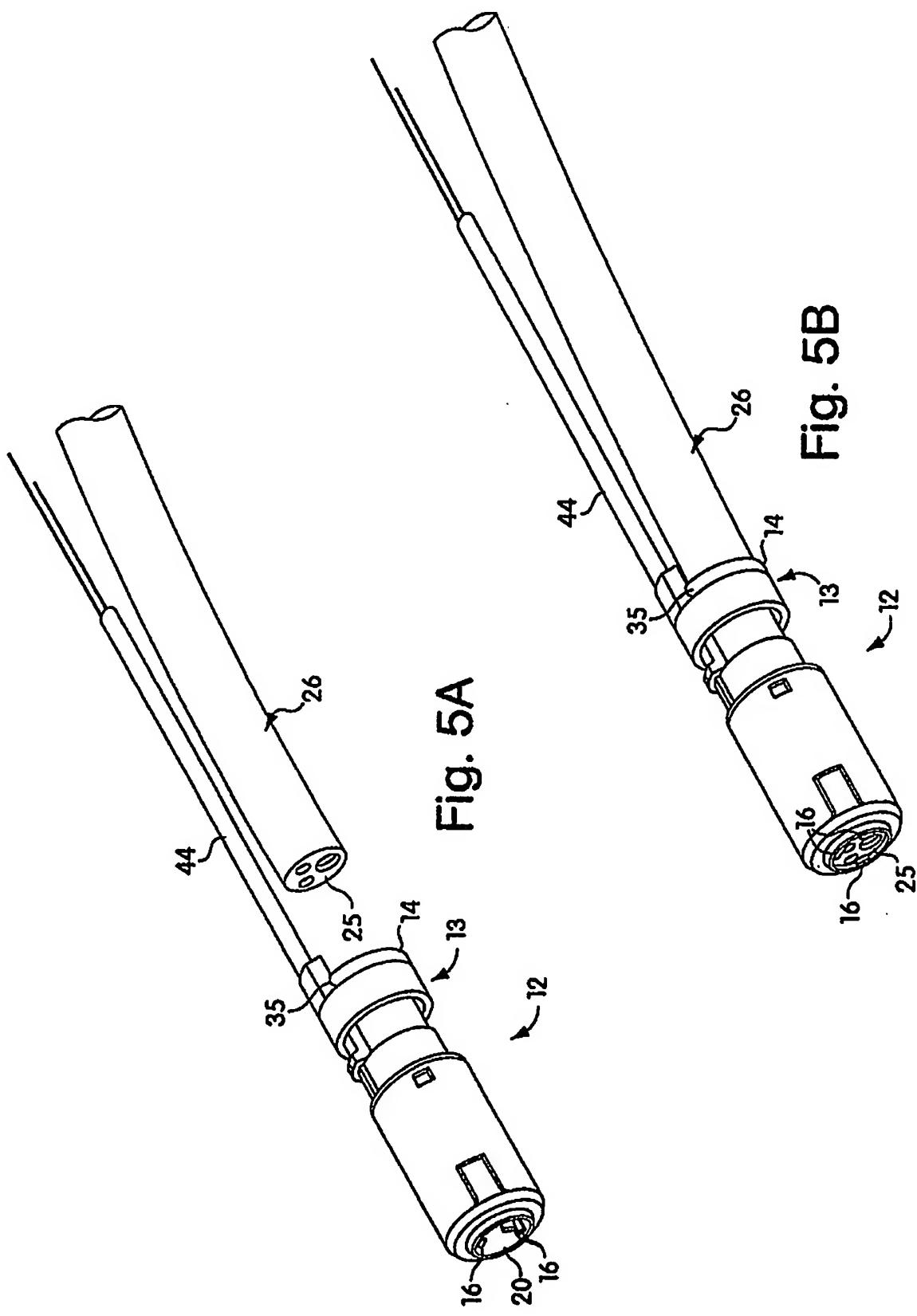
Fig. 4B

U.S. Patent

Apr. 17, 2007

Sheet 5 of 7

7,204,804 B2



U.S. Patent

Apr. 17, 2007

Sheet 6 of 7

7,204,804 B2

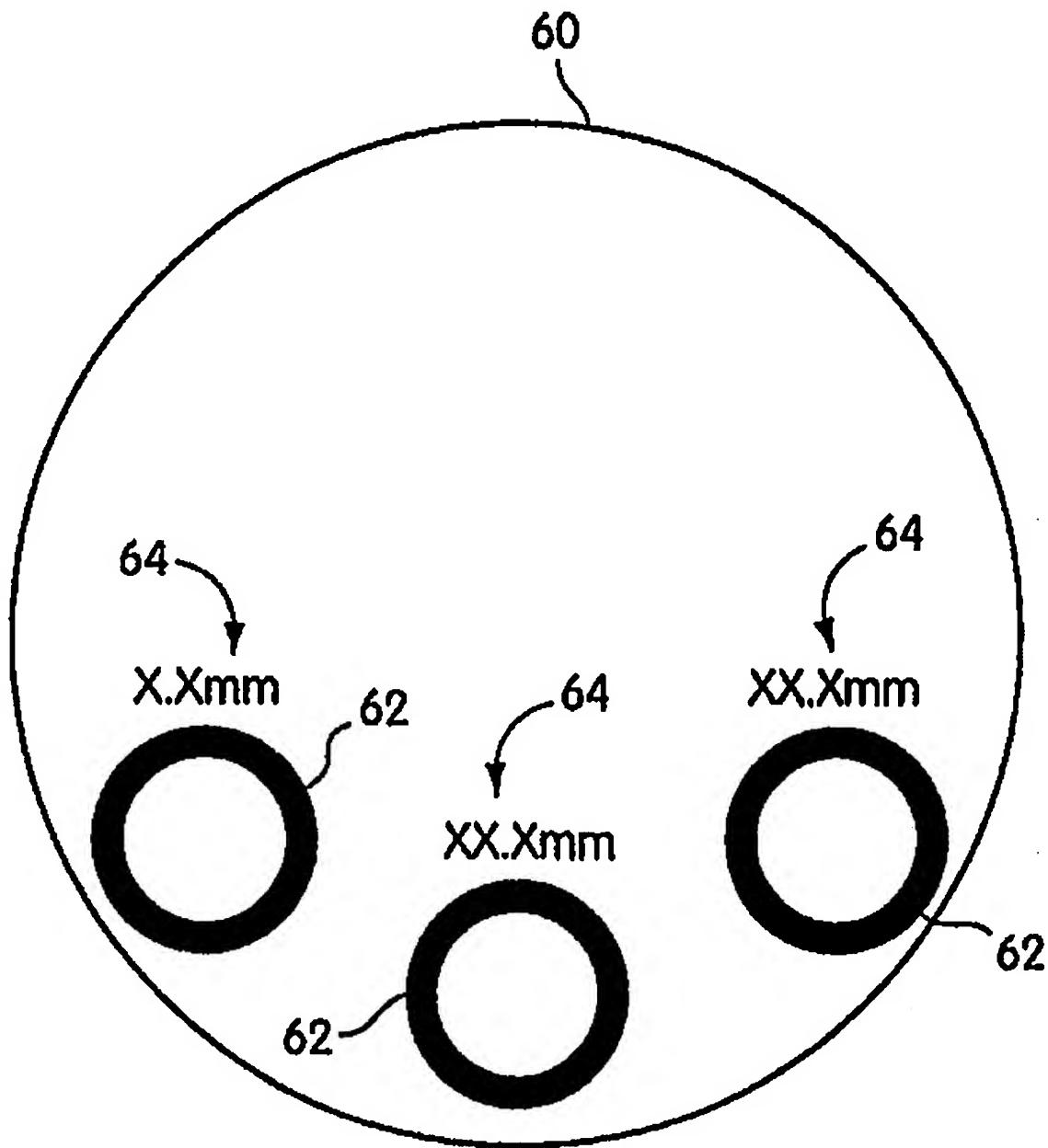


Fig. 6

U.S. Patent

Apr. 17, 2007

Sheet 7 of 7

7,204,804 B2

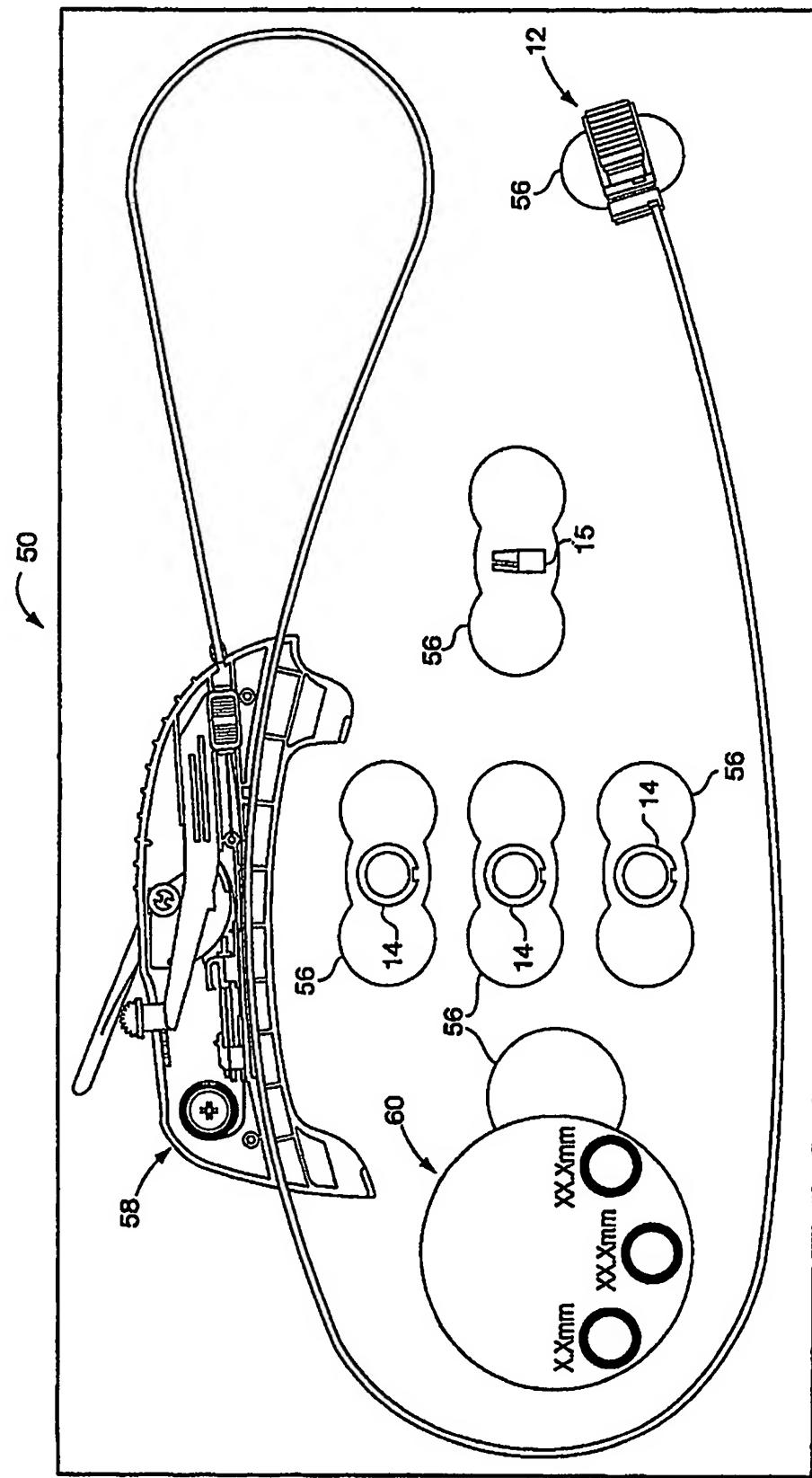


Fig. 7